

In the Claims

Claims 1-24 have been cancelled.

25. (Currently Amended) A method for compensation of frequency offset between a first wireless device and a second wireless device, the first wireless device and the second wireless device communicating in order to exchange data packets, the method comprising:

transmitting a plurality of frequency synchronization bursts from the first wireless device to a second wireless device, wherein each frequency synchronization burst from the plurality of synchronization bursts is transmitted at a particular, but differing frequency offset from a center frequency, and each frequency synchronization burst from the plurality of synchronization bursts is transmitted at a particular, but differing frequency offset from other frequency synchronization bursts from the plurality of synchronization bursts, and each frequency synchronization burst contains bits representing frequency position information; and

transmitting at the center frequency, one or more data packets to the second wireless device.

26. (Previously Amended) The method of claim 25 wherein the synchronization bursts also contains bits representing time position information.

27. (Previously Amended) The method as recited in claim 25 wherein transmitting the plurality of frequency synchronization bursts comprises:

transmitting the plurality of frequency synchronization bursts in a pattern; and  
transmitting bits representing a frequency position of each frequency synchronization burst relative to the data packets, the bits being transmitted as a part of the frequency synchronization burst, the relative position of the frequency synchronization bursts being predetermined in terms of time and frequency.

28. (Previously added) The method as recited in claim 25 further comprising the step of retaining an adjusted frequency of the second wireless device after the completion of an exchange of packets.

29. (Previously added) The method as recited in claim 25 further comprising transmitting frequency synchronization bursts before a transmission of beacon packets, the transmission of beacon packets being executed by a network coordinator device.

30. (Previously added) The method as recited in claim 25 wherein the frequency synchronization bursts are transmitted in a monotonic pattern.

31. (Previously added) The method as recited in claim 25 wherein the frequency synchronization bursts are transmitted in a converging pattern.

32. (Previously Amended) A method for compensation of frequency offset between a first wireless device and a second wireless device, the first wireless device and the second wireless device communicating in order to exchange data packets, the method comprising:

receiving a frequency synchronization burst transmitted at a particular frequency offset from a center frequency and containing bits representing frequency position information for the burst, and

receiving at the center frequency, one or more data packets.

33. (Previously added) The method of claim 32 wherein the frequency synchronization burst is one burst from a plurality of plurality of synchronization bursts with each burst being transmitted at a particular, but differing frequency offset from the center frequency.

34. (Previously Amended) The method of claim 32 wherein the synchronization bursts also contains bits representing time position information.

35. (Previously Amended) The method as recited in claim 32 wherein receiving the plurality of frequency synchronization bursts comprises:

receiving the plurality of frequency synchronization bursts in a pattern having bits representing a frequency position of each frequency synchronization burst relative to the data packets, the bits being received as a part of the frequency synchronization burst, the relative position of the frequency synchronization bursts being predetermined in terms of time and frequency.

36. (Previously added) The method as recited in claim 32 further comprising receiving frequency synchronization bursts before a reception of beacon packets, the transmission of beacon packets being executed by a network coordinator device.

37. (Previously added) The method as recited in claim 32 wherein the frequency synchronization bursts are received in a monotonic pattern.

38. (Previously added) The method as recited in claim 32 wherein the frequency synchronization bursts are received in a converging pattern.

39. (Currently Amended) An apparatus comprising:

a transmitter transmitting a plurality of frequency synchronization bursts from the first wireless device to a second wireless device, wherein each frequency synchronization burst from the plurality of synchronization bursts is transmitted at a particular, but differing frequency offset from a center frequency, and each frequency synchronization burst from the plurality of synchronization bursts is transmitted at a particular, but differing frequency offset from other frequency synchronization bursts from the plurality of synchronization bursts, and each frequency synchronization burst contains bits representing frequency position information for the burst, the transmitter additionally transmitting one or more data packets at the center frequency to the second wireless device.

40. (Previously Amended) The apparatus of claim 39 wherein the synchronization bursts also contains bits representing time position information.

41. (Previously added) The apparatus of claim 39 wherein the frequency synchronization bursts are transmitted before a transmission of beacon packets, the transmission of beacon packets being executed by a network coordinator device.

42. (Previously added) The apparatus of claim 39 wherein the frequency synchronization bursts are transmitted in a monotonic pattern.

43. (Previously added) The apparatus of claim 39 wherein the frequency synchronization bursts are transmitted in a converging pattern.

44. (Previously Added) An apparatus comprising:

a transmitter transmitting a plurality of synchronization bursts from the first wireless device to a second wireless device, wherein each synchronization burst from the plurality of synchronization bursts is transmitted at a particular, but differing time offset from a data packet and each synchronization burst contains bits representing said time offset of the burst, the transmitter additionally transmitting said data packet to the second wireless device.